IN THE UNITED STATES DISTRICT COURT
FOR THE EASTERN DISTRICT OF VIRGINIA
Alexandria Division

UNITED STATES OF AMERICA, et al.,	)	
	)	
Plaintiffs,	)	
	)	
v.	)	No. 1:23-cv-00108-LMB-JFA
	)	
GOOGLE LLC,	)	
	)	
Defendant.	)	

**[PROPOSED] ORDER REGARDING ELECTRONICALLY
STORED INFORMATION ("ESI")**

WHEREAS, Rule 26(f) of the Federal Rules of Civil Procedure states that the parties must

develop a proposed discovery plan that states the parties' views and proposals on, among other things,

"any issues about disclosure, discovery, or preservation of electronically stored information, including

the form or forms in which it should be produced," Fed. R. Civ. P. 26(f)(3)(C);

WHEREAS, the parties mutually seek to reduce the time, expense, and other burdens of

discovery of certain electronically stored information ("ESI") and privileged materials, as described

further below, and to better define the scope of their obligations with respect to preserving such

information and materials;

WHEREAS, the parties are aware of the importance of cooperation and commit to cooperate in

good faith throughout the matter to promote the "just, speedy, and inexpensive determination" of this

action, as required by Fed. R. Civ. P. 1. The parties agree to use reasonable, good faith, and

proportional efforts to preserve, identify and produce relevant and discoverable information consistent

with Fed. R. Civ. P. 26(b)(1). The parties' cooperation includes identifying appropriate limits to

eDiscovery, including limits on custodians, identifying relevant and discoverable subject matter,

establishing time periods for eDiscovery and other parameters to limit and guide preservation and

eDiscovery issues;

NOW THEREFORE, it is hereby ORDERED:

I. GENERAL PROVISIONS

1. Except as specifically set forth herein, this Order does not alter or affect the applicability of the Federal Rules of Civil Procedure or Local Rules for the United States District Court for the Eastern District of Virginia.

2. The production specifications set forth in this Stipulation and Order apply to Documents and ESI that is to be produced in the first instance in the above-captioned litigation. This Stipulation and Order do not apply to materials previously produced to any Plaintiff as part of a pre-complaint investigation. No Party is obligated to reformat any such prior production in accordance with the production specifications in this Stipulation and Order. The production specifications set forth in this Stipulation and Order do not apply to databases, data sources, logs, and other structured data except as described in paragraph M below.

3. "Action" means the action filed in this Court under the caption *United States, et al. v. Google LLC*, 23-cv-00108-LMB-JFA, as well as any additional actions subsequently transferred and/or centralized with this Action, including any related discovery, pretrial, trial, post-trial, or appellate proceedings. For the avoidance of doubt, "Action" excludes pre-Complaint investigations by Plaintiffs.

4. The parties agree to meet and confer to the extent that new plaintiff states are added later to the litigation and those states request reasonable modifications to these production specifications.

5. The term "Federal Agency Advertisers" ("FAAs") has the meaning set forth in paragraph 6.A of the Joint Proposed Discovery Plan at ECF 87, as adopted by the Court in the Scheduling Order at ECF 94.

II.   PRESERVATION

1. Materials To Be Preserved. Each Party will continue its retention practices with regards to all Documents and ESI and will take reasonable and proportionate steps to preserve relevant and discoverable ESI in compliance with duties to preserve material under the Federal Rules of Evidence and the Federal Rules of Civil Procedure. Upon mutual agreement of the parties, a party will modify its retention practices to ensure the preservation of potentially responsive Documents and ESI.

2. To reduce the costs and burdens of preservation and to ensure proper ESI is preserved, the parties agree that:

    a. Parties shall preserve non-duplicative relevant electronically stored information in their possession, custody, or control.

    b. Subject to and without waiving any protection described above, the parties agree that:

        i.   The parties will endeavor to agree upon a date limitation for the preservation of ESI;

        ii. The parties will endeavor to agree upon a list of the types of relevant ESI they believe should be preserved and the custodians for whom they believe relevant ESI should be preserved. The parties shall add or remove custodians as reasonably necessary.

3. The Court concludes that the following categories of ESI are not reasonably accessible in this litigation and orders that they need not be preserved, searched, collected, or reviewed. The parties will continue to meet and confer regarding any additional categories of information that are not reasonably accessible.

    a. Back-up systems used for disaster recovery and tapes used for disaster recovery;

    b. Individual user data subject to routine disposition required by privacy regulations;

    c.   Information from handsets, mobile devices, personal digital assistants, and tablets that is duplicative of information that resides in a reasonably accessible data source;

    d.   Logs of calls made from cellular phones;

    e.   Voicemail messages;

    f.   Slack, fragmented, or unallocated data accessible only by forensics;

    g.   Data stored in random access memory ("RAM"), temporary files, or other ephemeral data that are difficult to preserve without disabling the operating system;

    h.   Data in metadata fields that are frequently updated automatically, such as last-opened or last modified dates;

    i.   Ad logs created prior to April 19, 2023;[1]

    j.   Systems no longer in use that cannot be accessed as of the date the preservation obligation was triggered; and

    k.   Information created or copied during the routine, good-faith performance of processes for the deployment, maintenance, retirement, and/or disposition of computer equipment by the party that is duplicative of information that resides in a reasonably accessible data source.

4.   Nothing in this Stipulation and Order prevents any party from asserting, in accordance with the Federal Rules of Civil Procedure, that other categories of Documents or ESI are not reasonably accessible.[2]

5.   The parties agree to preserve ESI in such a way that it can be produced in a reasonably usable form in accordance with Federal Rule of Civil Procedure 34(b)(2)(E)(ii).

---

[1] The parties agree to meet and confer regarding a relevant and proportionate set of ad logs in the May and June 2023 timeframe to be sampled and/or preserved.

[2] The parties have met and conferred and have been unable to reach agreement as to whether the following types of ESI are not reasonably accessible: (a) Online access data such as temporary or cache files, including internet history, web browser cache and cookie files, wherever located, (b) Server, system, or network logs; and (c) Dynamic fields of databases, dashboards, or log files.

6. Preservation Does Not Affect Discoverability or Claims of Privilege. By preserving Documents and ESI for the purpose of this litigation, the Parties are not conceding that such material is discoverable, nor are they waiving any claim of privilege.

III. COLLECTION AND REVIEW

1. The parties agree that in responding to an initial Fed. R. Civ. P. 34 request, they will meet and confer about methods to search ESI in order to identify ESI that is subject to production in discovery and filter out ESI that is not subject to discovery.

2. The parties will meet and confer in good faith regarding search terms or use of technology-assisted review or a similar tool (collectively "TAR") to identify responsive documents. In the event a party elects to use search terms, if a requesting party objects to the sufficiency of the producing party's terms, the requesting Party may propose modifications or a list of additional terms. The parties will meet and confer in good faith regarding any proposed changes. Any disputes over search terms that cannot be resolved between the parties during a meet and confer may be consequently raised with the Court.

3. Nothing in this Order may be construed or interpreted as precluding a producing party from performing a responsiveness review to determine if documents captured by search terms are in fact relevant to the requesting party's request. Nothing in this Order precludes a party from using TAR, or some other method to fulfill their document production obligations, provided that the party discloses to the other party the process used and complies with the meet and confer obligations outlined in this Order. However, a producing party that wishes to use TAR in conjunction with search terms must meet and confer with the receiving party before using this method to collect and review documents and prior to negotiation of search terms. Nothing may be construed or interpreted as precluding a producing party from performing a privilege review of documents determined to be relevant by any means. Further, nothing in this Order shall be construed or interpreted as requiring the production

of all documents captured by any search term or TAR if that document is in good faith and reasonably deemed not relevant to the requesting party's request or privileged.

4. Each party will use its best efforts to filter out common system files and application executable files by using a commercially reasonable hash identification process. Hash values that may be filtered out during this process are located in the National Software Reference Library ("NSRL") NIST hash set list.

5. De-Duplication. Each party is required to produce only a single copy of a responsive document. A producing party electing to deduplicate shall deduplicate across Custodians and at the family-level only (i.e., if there are identical child documents that have different parents, they are not duplicative, and an attachment to a document is not a duplicate of the same document maintained as a standalone document). Each party may de-duplicate responsive ESI (based on Source Hash, MD5 hash values, or other industry standard method) across Custodians. For emails with families, the hash value is generated based on the parent/child document grouping. To the extent that deduplication through hash values is not possible, the parties shall meet and confer to discuss any other proposed method of deduplication. A producing party must make reasonable effort to identify all agreed upon custodians who were in possession of any de-duplicated documents through an appropriate load file field such as All Custodians. Additionally, all BCC recipients whose names would have been included in the BCC metadata field, to the extent such metadata exists, but are excluded because of horizontal/global de-duplication, must be identified in the BCC metadata field specified in Appendix 1. In the event of rolling productions of documents or ESI, the producing party will, as needed, supplement the load files with updated All Custodian information, as well as BCC information to the extent such metadata exists. Duplicate custodian information may be provided by a metadata overlay and will be provided by a producing party on an ongoing basis.

6. Email Threading. Production of a most inclusive email thread does not relieve the Producing Party of its obligation to produce responsive prior or lesser-included emails. No document shall be withheld from production solely on the basis that it is included in a produced more-inclusive email.

7. Cooperation. The Parties agree to work together in good faith to resolve any differences that they may have over the Producing Party's use of search terms or TAR, or a combination of the search terms and TAR, or some other method, or for documents that cannot be searched electronically.

8. Filtering. If a producing party proposes to apply other filters to limit Documents and ESI that is collected for processing and review (e.g., filters that identify system files, non-user generated files, or zero-byte files), the producing party shall advise the requesting party and the requesting and producing parties shall meet and confer regarding such additional proposed filters.

Each Party shall use its institutional knowledge of how its ESI is stored and accessed in the ordinary course of business to identify responsive Documents. This institutional knowledge includes, but is not limited to, a Party's standard practices regarding the storage of ESI, its file organization structure, its usage of group ownership, group accounts, and shared network locations to manage or organize ESI.

IV. PRODUCTION FORMAT

1. Subject to paragraph I.2 above, the parties agree to produce documents in the formats described in Appendix 1 to this Order. If particular documents warrant a different format, the parties will cooperate to arrange for the mutually acceptable production of such documents. The parties agree, to the extent practicable, not to materially degrade the searchability of the documents as part of the document production process.

V.   PRIVILEGE LOGS

1. Any Producing Party will produce a privilege log within 45 days after each production.[3] Except as provided otherwise below, for any Document withheld or redacted, the Producing Party will produce privilege logs in MS Excel (.xlsx) format.

2. If any member of a produced Document Family is withheld on grounds of privilege or work-product, the Producing Party shall produce a Bates stamped placeholder slipsheet that identifies the Document as withheld as privileged and shall identify the Document in the Privilege Log by the Bates number on the placeholder slipsheet.

3. Privilege logs shall be provided containing the following information, to the extent reasonably available:

    a. A sequential or control number associated with each entry in the privilege log;

    b. Where applicable, BegBates and Parent BegBates;

    c. The Custodian or Custodial or Non-Custodial Data Source from which the Document was collected;

    d. The name of each person who sent, authored, or otherwise prepared the Document;

    e. The identity of each person designated as an addressee or copyee, including CC and BCC (copyees and blind copyees shall appear in separate fields);

    f. The date;

    g. A description, pursuant to Federal Rule of Civil Procedure 26(b)(5)(A)(ii), of the contents of the withheld Document that, without revealing information that is itself privileged or protected, is sufficient to enable other Parties to understand the general subject matter of the Document and assess the basis of the claim of privilege or other protection from disclosure;

---

[3] The parties will meet and confer over an appropriate date for producing a privilege log relating to documents produced by Google prior to the filing of the complaint.

    h.   To the extent reasonably available, the name of the attorney(s) and legal organization who provided the legal advice at issue, from whom the legal advice at issue is requested, who directed the facilitation of the legal advice at issue, and/or who requested or prepared the Document;

    i.   The nature of the privilege or protection asserted (i.e., attorney-client privilege, work product doctrine).

4.   If a Producing Party contends that all Documents of a particular type or category are privileged, or requiring the creation of an individualized privilege log is not reasonable or proportionate for documents of a particular type or category, they shall meet and confer with the Receiving Party on identifying such Documents on a privilege log by category rather than individually. The Receiving Party shall consider any such request in good faith. The Producing Party's categorical privilege log entry must still provide the Requesting Party, and the Court if necessary, with information sufficient to evaluate the Producing Party's privilege claims.

5.   A single document containing multiple email messages (i.e., in an email chain) may be logged as a single entry.

6.   Each entry on a privilege log must indicate each person, group, or entity who was acting in a legal capacity with respect to that particular Document.

7.   If the Producing Party contends that more than one basis for withholding applies to a single Document, all bases must be asserted in the privilege log.

8.   Exclusions. To the extent any of the following Documents are privileged or otherwise protected from disclosure by Federal Rule of Civil Procedure 26(b)(3)-(4), they may be excluded from privilege logs:

    a.   Documents or communications sent solely between outside counsel for the Defendant (or persons employed by or acting on behalf of such counsel);

b. Documents or communications sent solely between counsel for the United States (or persons employed by the United States Department of Justice);

c. Documents or communications sent solely between counsel for the United States (or persons employed by the United States Department of Justice) and counsel for any state (or persons employed by any the office of the attorney general of any state);

d. Documents or communications sent solely between outside counsel for Defendant and inside counsel for Defendant;

e. Documents or communications sent solely between counsel for the United States (or persons employed by the United States Department of Justice) and counsel for any Federal Agency Advertiser;[4]

f. Documents or communications sent solely between counsel for any state and counsel for another state (or persons employed by the office of the attorney general any state);

g. Documents or communications sent solely between counsel within any state (or persons employed by the office of the attorney general of any state);

h. Documents or communications dated after January 24, 2023 and privileged solely on the basis that they relate to the prosecution or defense of this Action;

i. Documents that are non-discoverable or excluded from privilege log obligations under the Expert Stipulation; and

j. Documents that are not required to be logged under Section V(8)(g) of the ESI Order governing the multidistrict litigation captioned as In re Google Digital Advertising

---

[4] With respect to specific requests for production, the parties agree to meet and confer regarding whether this subsection (e) should apply to documents or communications sent solely between counsel for the United States (or persons employed by the United States Department of Justice) and counsel for federal government agencies other than the FAAs.

Antitrust Litigation that is pending in the U.S. District Court for the Southern District of New York under docket number 21-md-03010-PKC.[5]

9. If a Document contains both privileged and non-privileged communications, the non-privileged communications must be produced, either by separately producing a copy of the non-privileged communications embedded in the privileged communication, or by producing a copy of the entire communication string with the privileged portion(s) redacted. The redactions shall be narrowly applied so the Receiving Party has the ability to discern to the maximum extent practicable the privilege assertion within the Document and to view all non-privileged communications and material.

10. Redactions based on relevance or responsiveness or confidentiality are disallowed.[6] For the avoidance of doubt, (a) to the extent that any Document contains or reflects Source Code, as defined by the Protective Order, ECF No. 98, such Document will be governed by Appendix C of that Order, and (b) nothing in this Order prevents any party from redacting personal data and personally identifying numbers or sensitive information from produced documents, consistent with the requirements under Federal Rule of Civil Procedure 5.2 and Local Rules. The Parties do not waive any objections to the production, discoverability, admissibility, or confidentiality of Documents.

11. If a Document is produced with redactions, the redactions must not obscure any header information (e.g., from, to, subject, sent date) of any emails or other communications reflected in the Document, except to the extent that information is privileged.

12. A Party who, pursuant to a request under Federal Rule of Civil Procedure 34 or a non-party, pursuant to a request under Federal Rule of Civil Procedure 45, re-produces

---

[5] Nothing in this order precludes any party from moving, upon a showing of good cause, to modify these exclusions with respect to specific requests for production.
[6] The parties agree to meet and confer if one of the FAAs claims that producing certain documents on an unredacted basis would affect national security.

Documents from other matters, may produce privilege logs relating to that production in the manner they were produced in such other matters, so long as the privilege logs comply with Federal Rule of Civil Procedure 26(b)(5)(A). The party shall, however, reproduce these logs in Excel format upon request if reasonably possible to do so.

VI.   MISCELLANEOUS PROVISIONS

1. Motions. The parties shall raise discovery disputes in accordance with this Court's Local Rules.

2. Costs of Document Production. Unless this Court orders otherwise for good cause shown, each party and non-party shall bear the costs of collecting, processing, reviewing, and producing its own documents.

3. Integration/Appendices. The following documents are incorporated herein by reference:

   a. "Appendix 1" is a document describing the production format and fields to be included in the documents produced by each party.

IT IS HEREBY SO ORDERED this **20**th day of **April**_____, 2023.

_____ /s/ _____
John F. Anderson
United States Magistrate Judge

APPENDIX 1: PRODUCTION FORMAT

A. **Production Components**. Except as otherwise provided below, ESI shall be produced in accordance with the following specifications:

1. An ASCII delimited data file (.DAT) with ASCII 020 for the comma character and ASCII 254 for the quote character and ASCII174 for new line character, with all values in a multi-value field separated by a semi-colon ASCII 059 (with the use of commas and quotes as delimiters not acceptable using standard delimiters) and encoded in UTF-8;

2. An image load file (.OPT) that can be loaded into commercially acceptable production software (e.g. Concordance). The Image Load File shall contain the following comma-delimited fields: BEGBATES, VOLUME, IMAGE FILE PATH, DOCUMENT BREAK, FOLDER BREAK, BOX BREAK, PAGE COUNT;

3. TIFF images;

4. Document level .TXT files for all documents containing extracted full text or OCR text;

5. Parent-child relationships will be maintained in production and child files should be produced consecutively following parent files and shall be sequentially Bates stamped. The Producing Party shall ensure the metadata fields for BegAttach and EndAttach referenced in Parts D and E of this Appendix A are accurately populated;

6. Document families must be produced, even if only the parent email or an attachment to an email is responsive, except (1) common system files and application executable files pursuant to paragraph III.4 above, and (2) documents that are withheld on the basis of attorney-client privilege or work product protection. For the avoidance of doubt, documents that are linked are not part of the same family for purposes of this Order. Linked documents are governed by Section K below.

If a particular document or category of documents warrants a different production format, for example if it is impractical to produce an entire document family for particular documents, the parties will cooperate in good faith to arrange for a mutually acceptable production format.

B. **Production Media and Access Controls**. Documents shall be produced through electronic means, such as the DOJ's secure file sharing method (JEFS) or on CD, DVD, flash drive or external hard drive ("Production Media"). Each piece of Production Media shall identify a production number corresponding to the production volume (e.g. "VOL001"). Each piece of Production Media shall also identify: (a) the producing party's name; (2) the production date; (3) the Bates Number range of the materials contained on the Production Media.

Nothing in this Order will preclude or impair any and all protections provided the parties by any Protective Order(s) agreed and entered into by the parties. Any data produced by the producing party must be protected in transit, in use, and at rest by all in receipt of such data. Parties will use best efforts to avoid the unnecessary copying or transmittal of produced documents. Any copies made of produced data must be kept on media or hardware employing whole-disk or folder level encryption or otherwise secured on information systems and networks in a manner consistent with the best practices for data protection. If questions arise, Parties will meet and confer to ensure security concerns are addressed prior to the exchange of any documents.

C. **Data Load Files/Image Load Files**. All production items will be provided with a delimited data file or "load file," which will include both an image cross-reference load file (such as an Opticon file) and a metadata (.dat) file with the metadata fields identified below on the document level to the extent available. Each TIFF in a production must be referenced in the corresponding image load file. The total number of documents referenced in a production's data load file should match the total number of designated document breaks in the image load file(s) in the production. The total number of pages referenced in a production's image load file should

match the total number of TIFF files in the production. All images must be assigned a unique Bates number that is sequential within a given document and across the production sets. The Bates numbers in the image load file must match the corresponding documents' beginning Bates numbers in the data load file. The total number of documents in a production should match the total number of records in the data load file. Load files shall not vary in format or structure within a production, or from one production to another.

D.   Metadata Fields—Google and Non-Parties. With the exception of hard copy paper documents, which are separately addressed in paragraph N below, and except as provided in I.2, Google and non-parties shall produce each of the metadata and coding fields set forth below to the extent that it is reasonably practicable to do so. Google and non-parties are not obligated to populate manually any of the fields below if such fields cannot be extracted from a document, with the exception of the following: (a) BEGBATES, (b) ENDBATES, (c) BEGATTACH, (d) ENDATTACH, (e) CUSTODIAN, (f) ALLCUSTODIANS, (g) CONFIDENTIALITY, (h) REDACTIONS, (i) NATIVEFILEPATH, and (j) TEXTFILEPATH, which should be populated by Google or the non-party, or the respective vendor. Google and non-parties will make reasonable efforts to ensure that metadata fields automatically extracted from the documents correspond directly to the information that exists in the original documents.

Field Name[7]	Field Description
BEGBATES	Beginning Bates number as stamped on the production image
ENDBATES	Ending Bates number as stamped on the production image
BEGATTACH	First production Bates number of the first document in a family

---

[7] Field names can vary from system to system and even between different versions of systems. Thus, Parties are to be guided by these Field Names and Field Descriptions when identifying the metadata fields to be produced for a given document pursuant to this ESI Protocol Order.

ENDATTACH	Last production Bates number of the last document in a family
CUSTODIAN	Individual from whom the document originated
ALLCUSTODIAN(S)	Individual(s) whose documents de-duplicated out
CONFIDENTIALITY	Confidentiality designation assigned to document
MD5 HASH VALUE	MD5 hash value of document
SOURCE HASH VALUE	Google Drive Source hash value
AUTHOR	Any value populated in the Author field of the document and/or Google Drive properties (Edoc or attachment only)
DATECREATED	Date the document was created (format: MM/DD/YYYY) (Edoc or attachment only)
DATEMODIFIED	Date when document was last modified according to filesystem information (format: MM/DD/YYYY) (Edoc or attachment only)
FROM	The name and email address of the sender of the email
TO	All recipients that were included on the "To" line of the email
CC	All recipients that were included on the "CC" line of the email
BCC	All recipients that were included on the "BCC" line of the email
ATTACHMENT COUNT	Number of Attached Documents
ATTACHMENT NAME	File name of the document attachment or embedded document; associate with the parent/email which lists any and all filenames of the children/attachments delimited by a semicolon. The field would be populated for parent documents (not for the children)
ATTACHMENTID	The IDs of the documents that are attached to the produced document
COMPANIES	Globally populated field containing the name of producing party (not the law firm or vendor name). Not pulled from metadata.
DATE CREATED	Date the electronic file was created. Format: MM/DD/YYYY.
TIME CREATED	Time the electronic file was created (format: HH:MM:SS)

DATERECEIVED	Date email was received (format: MM/DD/YYYY)
DATESENT	Date email was sent (format: MM/DD/YYYY)
DATESTART	Start date and time of calendar appointments, voice messages, chats, text message conversations. Format: MM/DD/YYYY HH:MM:SS (use 24 hour times, e.g., 13:32:00 for 1:32 pm); time zone indicators cannot be included.
DATEEND	End date and time of calendar appointments, voice messages, chats, text message conversations. Format: MM/DD/YYYY HH:MM:SS (use 24 hour times, e.g., 13:32:00 for 1:32 pm); time zone indicators cannot be included.
DOCUMENT TYPE	The file type for Google files. See https://support.google.com/vault/answer/6099459#drivexml&zippy=%2Cfile-parameters-in-the-metadata-file.
DOC LINK	Metadata tying linked and linking documents, per Section K, below.
FILESIZE	The original file size of the produced document
ORIGINATING PATH	File path of the file as it resided in its original environment. For email, the full folder path of email within a mail store when collected, including file name; or full folder path of instant message or text message when collected including file name; or Hard Copy folder/binder title/label. Prepend with Custodian Name (sample: Smith, James-Inbox\Active). For other documents, the full absolute original path to the native, including original file name and root directory as they existed in their original environment, such that all information needed to locate the file is in the path. Prepend with recognizable Custodian Name; e.g. Smith, James-C\MyDocuments\Sales Info\ACME\2017-Monthly- Sales.xlsx
REDACTIONS	Indicate Yes if a document is redacted. If no leave blank.
NATIVE LINK	Native File Link (Native Files only)

EMAIL THREAD ID	Unique identification number that permits threading of email conversations. For instance, MS Outlook identification number ("PR CONVERSATION INDEX") is 22 bytes in length, followed by zero or more child blocks each 5 bytes in length, that facilitates use of email threading. (Microsoft application documents only)
TEXTFILEPATH	Path to extracted text/OCR file for document
EMAILSUBJECT	Subject Line of email
TIMESENT	Time email was sent
TIMEZONEUSED	Time zone used to standardize date/time during document processing
RECEIVETIME	Time email was received
FILENAME	File Name of the edoc or email
TITLE	Any value populated in Title field of the document properties
SUBJECT	Any value populated in the Subject field of the document properties
DOCEXT	File extension of the document
WITHHELD PLACEHOLDER	To the extent a document is fully withheld (on the basis of privilege or otherwise), this field must be populated with a "Y". If not applicable leave blank.
TECHNICAL ISSUE PLACEHOLDER	To the extent a file is withheld on the basis of a technical issue, this field must be populated with a "Y". If not applicable leave blank.
VOLUMENAME	Unique production volume identifier applied (e.g., ABC001-001).
PAGECOUNT	For Documents produced in TIFF form, number of pages in the Document. For Documents produced in native, page count will be 1 (for placeholder)

E.   **Metadata Fields—Plaintiffs**. With the exception of hard copy paper documents, which

are separately addressed in paragraph N below, and except as provided in I.2, Plaintiffs shall

produce documents containing the following metadata, where such metadata is reasonably

available. Plaintiffs are not obligated to populate manually any of the fields below if such fields

cannot be extracted from a document, with the exception of the following: (a) BEGBATES, (b)

ENDBATES, (c) BEGATTACH, (d) ENDATTACH, (e) CUSTODIAN, and (f) FILEPATH,

which should be populated by Plaintiffs or the Plaintiffs' vendor. Plaintiffs will make reasonable

efforts to ensure that metadata fields automatically extracted from the documents correspond

directly to the information that exists in the original documents.

Field Name	Field Description	Field Type	Hard Copy	Email	Other ESI	Calendar Items	IMs, Texts, Chats
DOCID	The unique sequential document control number of the first page of the document. Cannot contain spaces or special characters.	Note Text	✔	✔	✔	✔	✔
ENDDOC	The unique sequential control number of the last page of the document. Cannot contain spaces or special characters.	Note Text	✔	✔	✔	✔	✔
COMPANIES	Globally populated field containing the name of producing party (not the law firm or vendor name). Not pulled from metadata.	Multi-Entry	✔	✔	✔	✔	✔
CUSTODIAN	Name of the individual, or group/department for shared resources, from whose files the document originated. Format: Last, First or ABC Dept. Use consistent naming and formatting across all productions.	Note Text	✔	✔	✔	✔	✔
ALLCUSTODIANS	All custodians who were in possession of a deduplicated document, including the person or group identified in the CUSTODIAN field. Format: Last, First or ABC Dept. Use consistent naming and formatting across all productions.	Multi-Entry	✔	✔	✔	✔	✔
MEDIAID	The unique identifier applied to each physical piece of media delivered (e.g., ABC001).	Note Text	✔	✔	✔	✔	✔
VOLUMENAME	Unique production volume identifier applied (e.g., ABC001-001).	Note Text	✔	✔	✔	✔	✔
BEGATTACH	Used for documents in a family group (e.g. an email with attachments). Populated with the document control number of the parent document. Populated for each child document as well as the parent document.	Note Text	✔	✔	✔	✔	✔
ENDATTACH	Used for documents in a family group (e.g. an email with attachments). Populated with the ENDDOC of the last child record in the family group. Populated for each child document as well as the parent document.	Note Text	✔	✔	✔	✔	✔

Field	Description	Type					
EPROPERTIES	Indicates record type, privilege, translation and other notations. Include all that apply, only the applicable record type or notation category names should be entered: Record Type: Edoc, Edoc Attachment, Email, Email Attachment, Hard Copy, Calendar, Text Message, Text Attachment, IM, Chat, Chat Attachment, Audio, Video, Voicemail Other Notations: Placeholder, Translation, Translated Privilege Notations: Redacted, Privileged, Family Member of Priv Doc	Multi-Entry	✔	✔	✔	✔	✔
TIMEZONE	The TimeZone in which the custodian is normally located.	Note Text		✔	✔	✔	✔
FOLDERLABEL	Full folder path of email within a mail store when collected, including file name; or full folder path of instant message or text message when collected including file name; or Hard Copy folder/binder title/label. Prepend with Custodian Name (sample: Smith, James-Inbox\Active).	Multi-Entry	✔	✔		✔	✔
FROM	Sender of the Email, Instant Message, Text Message, Chat, or Calendar item.	Note Text		✔		✔	✔
TO	Primary recipients of the Email, Instant Message, Text Message, Chat, or Calendar Item. Separate multiple entries with a semi-colon followed by a space.	Multi-Entry		✔		✔	✔
CC	Copyees of the Email, Instant Message, Text Message, Chat or Calendar Item. Separate multiple entries with a semi-colon followed by a space.	Multi-Entry		✔		✔	✔
BCC	Blind Copyees of the Email, Instant Message, Text Message, Chat or Calendar Item. Separate multiple entries with a semi-colon followed by a space.	Multi-Entry		✔		✔	✔
SUBJECT	Subject line of the Email, Instant Message, Text Message, Chat, calendar item, or Notes item.	Note Text		✔		✔	✔
DATEHC	Date of hard copy documents, if coded. Format: MM/DD/YYYY. Leave time segment blank.	Date	✔				
DATESENT	Date and time the Email, Instant Message, Text Message, Chat or Calendar Item was sent. Format: MM/DD/YYYY HH:MM:SS (use 24 hour times, e.g., 13:32:00 for 1:32 pm); time zone indicators cannot be included).	Date-Time		✔		✔	✔
DATERECEIVED	Date and time the Email, Instant Message, Text Message, Chat or Calendar Item was received. Format: MM/DD/YYYY HH:MM:SS (use 24 hour times, e.g., 13:32:00 for 1:32 pm); time zone indicators cannot be included.	Date-Time		✔		✔	✔

HEADER	The internet header information from each Email.	Note Text		✔		✔	
INTERNETMSGID	Internet message ID assigned by the outgoing mail server which typically includes messageid and a domain name. Example: 0E6648D558F338179524D555@m1p.innovy.net	Note Text		✔		✔	
MESSAGEID	Unique identifier of email messages in mail stores. EntryID for Microsoft Outlook, the UniqueID (UNID) for Lotus Notes, or equivalent value for other proprietary mail store formats.	Note Text		✔		✔	
INREPLYTOID	Internet message ID of the Email being replied to.	Note Text		✔		✔	
CONVERSATIONINDEX	Conversation index value for Microsoft Exchange emails.	Note Text		✔		✔	
IMPORTANCE	Indicates priority level set for message.	Note Text		✔		✔	✔
DELIVERYRECEIPT	Delivery receipt request notification for Email messages.	Note Text		✔		✔	
READRECEIPT	Read Receipt request notification for Email messages.	Note Text		✔		✔	
SENSITIVITY	Sensitivity field from Email messages or calendar items.	Note Text		✔		✔	
REVISION	Revision number extracted from metadata of native file.	Note Text			✔		
DATECREATED	Date and time the electronic file was created. Format: MM/DD/YYYY HH:MM:SS (use 24 hour times, e.g., 13:32:00 for 1:32 pm); time zone indicators cannot be included).	Date-Time			✔		✔
DATESAVED	Date and time the electronic file was last modified. Format: MM/DD/YYYY HH:MM:SS (use 24 hour times, e.g., 13:32:00 for 1:32 pm); time zone indicators cannot be included.	Date-Time			✔		✔
EORGANIZATION	"Company" field value pulled from the metadata of a native file.	Note Text			✔		
EAUTHOR	Author field value pulled from the metadata of a native file.	Note Text			✔		
LASTAUTHOR	Last Saved By field value pulled from metadata of a native file.	Note Text			✔		

Field	Description	Type					
ESUBJECT	Title or Subject field value pulled from metadata from electronic file.	Note Text			✔		
FILENAME	Original file name of the native file, including file extension.	Note Text		✔	✔	✔	✔
APPLICATION	Application used to create or transmit the original native files, document, message, appointment (e.g., WhatsApp, Excel, Slack, Outlook, Snapchat, Word, Twitter, Gmail, Tango).	Note Text		✔	✔	✔	✔
FILEEXTENSION	File extension of original native file; e.g. XLSX, PDF, DOCX	Max 5 chars		✔	✔	✔	
FILEPATH	Full qualified original path to the native when collected, including original file name. Prepend with recognizable Custodian Name; e.g. Smith, James-C\My Documents\Sales Info\ACME\2017-Monthly-Sales.xlsx	Multi-Entry		✔	✔	✔	
DOCLINK	File path location to the current native file location on the delivery medium.	Note Text			✔		
DATESTART	Start date and time of calendar appointments, voice messages, chats, text message conversations. Format: MM/DD/YYYY HH:MM:SS (use 24 hour times, e.g., 13:32:00 for 1:32 pm); time zone indicators cannot be included.	Date-Time				✔	✔
DATEEND	End date and time of calendar appointments, voice messages, chats, text message conversations. Format: MM/DD/YYYY HH:MM:SS (use 24 hour times, e.g., 13:32:00 for 1:32 pm); time zone indicators cannot be included.	Date-Time				✔	✔
ACCOUNT	Unique account ID	Note Text					✔
DURATION	The elapsed time of the audio, video, voice message. Format HH:MM:SS	Note Text			✔		
DIRECTION	Identifies direction of communication or other routing information; Outgoing, Incoming.	Note Text					✔
TXT-CHATROOMNAME	Name of chat room used in the communications.	Note Text					✔
TXT-PARTICIPANTS	List of participant names and/or telephone numbers.	Note Text					✔
TXT-BODY	Body of text messages, instant messages, notes, or chats. Do not populate for emails or calendar items.	Note Text					✔

TXT-STATUS	Indicates whether text was Sent or Read on the device.	Note Text					✔
TXT-THREAD-GROUP	Populate with the DOCID of the first text in a conversation or chat.	Note Text					✔
HASHMD5	Document MD5 hash value (used for deduplication or other processing).	Note Text		✔	✔	✔	✔
HASHSHA	Document SHA hash value (used for deduplication or other processing).	Note Text		✔	✔	✔	✔
SPECNO	Subpoena/request paragraph number to which the document is responsive.	Multi-Entry	✔	✔	✔	✔	✔
SEARCHVALUES	Specific search terms used to identify the record as responsive (if used).	Multi-Entry	✔	✔	✔	✔	✔

F.   TIFFs. Documents that exist only in hard copy format shall be scanned and produced as TIFFs. Documents that exist as ESI shall be converted and produced as TIFFs, except as provided below. The imaged data shall retain all attributes of the native or hard-copy file to the extent reasonably practicable. To the extent reasonably practicable, produced TIFF images will show all text and images that are visible in the form in which the electronic document was last saved, with the exception of redacted portions. Hidden content, tracked changes or edits, comments, notes, and other similar information, shall to the extent reasonably practicable, be produced in native or Microsoft-equivalent format, or be imaged so that such content is viewable on the image file.

Where hidden content, tracked changes or edits, comments, notes, or other similar information is not readable in its produced format, a party that received the document may make reasonable requests that a more readable version, such as a native or Microsoft-equivalent version, be produced when helpful to interpret the contents of the relevant document. To the extent a response to discovery requires production of Document(s) accessible only through proprietary or enterprise software, the Parties shall meet and confer to finalize the appropriate production format. Unless excepted below, single page, black and white, Group IV TIFFs should be

provided, at least 300 dots per inch (dpi) for all documents, with corresponding multi-page text

and necessary load files. Each TIFF image shall be named according to a unique corresponding

Bates number associated with the document. Each image shall be branded according to the Bates

number and the agreed upon confidentiality designation. Original document orientation should be

maintained (i.e., portrait to portrait and landscape to landscape). Documents that are difficult to

render in TIFF because of technical issues, or any other documents that are impracticable to

render in TIFF format, may be produced in their native format with a placeholder TIFF image

stating "Document Produced Natively." A producing party retains the option to produce ESI in

alternative formats if so agreed by the requesting party, which may include native format, or a

combination of native and TIFF formats. For future productions of documents responsive to

properly propounded requests issued pursuant to Fed. R. Civ. P. 34 and 45, the producing party

will make reasonable efforts to identify documents with readability issues in advance of

production and, where issues are detected, to produce the document(s) in a more readable format

(such as in native or Microsoft-equivalent form). The foregoing provisions of Section F do not

apply to Investigation Materials (as defined in the governing Confidentiality Order, ECF No.

297) or other cloned discovery. To the extent that Investigation Materials or other cloned

discovery contain documents responsive to properly propounded requests issued pursuant to Fed.

R. Civ. P. 34 and 45 where the TIFF image is unreadable or has materially degraded the quality

of the original, the producing party shall, when requested and where possible and proportionate,

provide a higher quality TIFF image, or the native, Microsoft-equivalent, or original file. The

provisions of this Section F apply to any type of document (including emails, presentations,

spreadsheets, and other types of documents).

   G.   **Color**. A party that received a production may make reasonable requests that color images

be produced where color is helpful to interpret the contents of the relevant document. The

production of documents and/or ESI in color shall be made in single-page JPEG format (300 DPI).

All requirements for productions stated in this ESI Protocol regarding productions in TIFF format apply to any productions of documents and/or ESI in color made in such an alternative format. Reasonable requests that a document be produced in color for the reasons set forth in this Paragraph will not be unreasonably denied by the producing party. If a producing party wishes to object, it may do so by responding in writing and setting forth its objection(s) to the production of the requested document in color.

H.   **Text Files.** A single multi-page text file shall be provided for each document, and the filename should match its respective TIFF filename. When possible, the text of native files should be extracted directly from the native file. Text files will not contain the redacted portions of the documents. A commercially acceptable technology for optical character recognition "OCR" shall be used for all scanned, hard copy documents and for documents with redactions. All Documents shall be produced with a link in the TextLink metadata field.

I.   **Native Files.** Spreadsheets (e.g. MS Excel) will be produced in native format unless redacted. In the event spreadsheets require redactions, they shall be produced in Microsoft-equivalent format (.xls, .xlsx).[8] If a Requesting Party reasonably determines that a redacted file is not reasonably usable, the Requesting Party and the Producing Party will discuss an alternative method to produce the file in a reasonably usable format. To the extent that they are produced in this action, audio, video, and multi-media files will be produced in native format. Native files shall be produced with a link in the NATIVEFILEPATH field, along with extracted text (where extracted text is available) and applicable metadata fields set forth in paragraphs D or E above. A Bates numbered TIFF placeholder indicating that the document was provided in native format must accompany every native file.

---

[8] If a large number of excels require redaction, the parties agree to meet and confer to agree upon reasonable modifications to this paragraph to facilitate the production of those documents.

J.   **Request for Other Native Files.** Other than as specifically set forth above, a producing

party need not produce documents in native format. If a party would like a particular document

produced in native format and this ESI protocol does not require the production of that document

in its native format, the party making such a request shall explain the reason for its request that

the document be produced in its native format. The requesting party will provide a specific Bates

range for documents it wishes to be produced in native format. The producing party need only

produce such a document in native format if reasonably practicable. Any native files that are

produced should be produced with a link in the Native Link field, along with all extracted text and

applicable metadata fields set forth in Sections D and E of this Appendix 1.

K.   **Linked Files and Collaborative Work Environments.** For documents responsive to

properly propounded requests issued pursuant to Fed. R. Civ. P. 34 or 45, the producing party

shall conduct an automated search across all emails to be produced, where the producing party has

access to a tool capable of performing such an automated search, to identify any emails that

contain links to another document and will conduct a reasonable search for the document

corresponding with each identified link. A receiving party may also make reasonable and

proportionate requests that the producing party conduct a reasonable search for relevant

documents identified via hyperlinks. For each link identified by the receiving party, the producing

party shall conduct a reasonable search for the document corresponding with the link. The

producing party shall process and produce relevant documents corresponding with the links with

reasonably available metadata. For documents produced pursuant to this Section K, the producing

party is not required to conduct any further search of documents corresponding with the links. The

provisions of this Section K apply to any type of document (including emails, presentations,

spreadsheets, and other types of documents). For documents produced pursuant to this Section K,

the producing party shall produce DOC LINK metadata as defined in Sections D and E of this

Appendix 1.[9]

L.   Confidentiality Designation. Responsive documents in TIFF format will be stamped with

the appropriate confidentiality designations in accordance with the Protective Order entered in this

matter. Each responsive document produced in native format will have its confidentiality

designation identified in the filename of the native file and indicated on its corresponding TIFF

placeholder.

M.   Databases, Data Sources, Logs, and Other Structured Data. The parties shall meet and

confer regarding the production format and scope of data contained in databases, data sources, and

logs in order to ensure that any information produced is reasonably usable by the receiving party

and that its production does not impose an undue burden on the producing party. To avoid doubt,

information will be considered reasonably usable when produced in Parquet or other commonly

utilized electronic formats, including CSV format, other character-delimited text format, Microsoft

Excel format, or Microsoft Access format. To the extent a party is constrained from producing

responsive ESI because of a third-party license or because software necessary to view the ESI is

hardware-dependent, the parties shall meet and confer in an attempt to reach an agreement on

whether alternative methods exist to enable the requesting party to view the ESI.

N.   Paper Documents. A producing party may make paper documents available for inspection

and copying in accordance with Federal Rules of Civil Procedure 34 and 45 or, additionally or

alternatively, scan and OCR paper documents. The following information shall be produced in the

load file accompanying production of paper documents produced by scan and OCR to the extent

reasonably practicable: (a) Beg Bates, (b) End Bates, (e) Custodian, (f) Confidentiality, (g)

Redacted; (h) BegAttach (if applicable), (i) EndAttach (if applicable), (l) TextLink, (m)

---

[9] Alternatively, for a document where an email has a hyperlink to another document, the producing party may produce the email with the hyperlinked document as an attachment.

HashValue. Paper documents should be logically unitized for production to the extent reasonably practicable. Generally, when scanning paper documents for production, distinct documents shall not be merged into a single record and single documents shall not be split into multiple records. The parties will make reasonable efforts to unitize documents correctly. Where a document or a document group — such as a folder, clipped bundle, or binder—has an identification spine or other label, the information on the label shall be scanned and produced as the first page of the document or grouping to the extent reasonably practicable.

O.   Date and Time. No party shall modify the date or time as contained in any original ESI. This provision does not prevent parties from deleting inaccurate date or time information that arises as an incident of collection or processing.

P.   Time Zone. To the extent reasonably practicable, ESI items shall be processed using a consistent time zone and the time zone shall be disclosed to the requesting party.

Q.   Auto Date/Time Stamps. To the extent reasonably practicable, ESI items shall be processed so as to preserve the data/time shown in the document as it was last saved, not the date of collection or processing.

R.   Hidden Text. ESI items shall be processed, to the extent practicable, in a manner that preserves hidden columns or rows, hidden text and fields, worksheets, speaker notes, tracked changes, and comments.

S.   Bates Numbers. Bates number must always: (1) contain no special characters or spaces;[10] (2) for TIFF images, be sequential within a given Document; (3) identify the Producing Party; (4) maintain a constant length of nine numeric digits (including 0-padding) across the entire production; and (5) be unique across the entire production. Bates number must also maintain consistent numbering across a family of Documents. Bates numbers shall

---

[10] For the avoidance of doubt, hyphens, dashes, and underscores are permitted and are not "special characters" within the meaning of this provision.

not be applied in a way that causes the text of the original Document to be obscured, deleted, or removed. If the Document contains a Bates number from a prior lawsuit, investigation, or production, the Producing Party shall avoid obscuring the previous Bates number or alternatively, shall provide a metadata overlay allowing the Requesting Party to identify the corresponding Bates number.

T.   **Compression Files.** Compression or container file types (e.g., .CAB, .GZ, .RAR. .ZIP), shall, where possible, be decompressed to ensure that a compressed file within a compression or container file are decompressed into the lowest possible compression resulting in individual folders and/or files. Original compression files and container files need not be produced, provided that all Documents within the compression or container file are produced in accordance with the specifications of this Order.

U.   **Password Protected/Encrypted Files.** To the extent Documents are password-protected or encrypted, the requesting party may make reasonable requests for the producing party to process such Documents for review. To facilitate the identification of such documents, the producing party shall provide a slip-sheet for any document that failed to process because it was password-protected or encrypted. Any slip-sheet produced pursuant to this Appendix U shall indicate that the reason the document failed to process was password-protection or encryption, as applicable. The producing party shall use reasonable efforts to produce such documents where possible and proportionate to do so. The parties shall meet and confer to resolve any disputes arising under this Appendix U.